

Remarks/Arguments

Rejection of Claims 2-12, 14-24, 26-34, 36-43, and 46-50 under 35 U.S.C. §103(a)

The Examiner rejected Claims 2-12, 14-24, 26-34, 36-43, and 46-50 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,295,052 (Chin) in view of U.S. Patent No. 5,076,660 (Messinger). Applicants respectfully traverse the rejection.

Claim 4

Chin does not teach an illumination source protected from direct physical intrusion from all directions

Claim 4 recites: “said heat sink assembly and said lens are arranged to protect, *from all directions*, said illumination source from direct physical intrusion from outside said microscope.” (emphasis added). In the Response to Arguments, the Examiner asserts that Fig. 1 shows that Chin teaches the above limitation. The Examiner bases this assertion of the further assertion that Fig. 1 is a cut away view of Chin’s device. Assuming *arguendo* that Chin is analogous to the present invention, there is no support for the Examiner’s assertion regarding Fig. 1. Chin does not refer to Fig. 1 as a cut away, nor does Chin infer that Fig. 1 is a cut away. In the “Brief Description of the Drawings” Chin states: “Fig. 1 is a *front view* of a light source according to the invention.” (emphasis added). A front view is not a cut away view. There is no other drawing showing section lines for a cut away with reference to Fig. 1. Further, Fig. 2 shows a variety of elements located on the front face of the light source, for example elements 94 and 25 that also are shown in Fig. 1.

The Examiner also asserts that Fig. 2 supports the Examiner’s assertion regarding Fig. 1 being a cut-away view, since Fig. 2 shows no break in the exterior surface of the light source. This is irrelevant. Fig. 2 shows the top of the light source and Fig. 1 shows the front of the light source. The characteristics of the top surface are not necessarily (and in this case are not) applicable to the front surface. In fact, as noted above, Fig. 2 reinforces Fig. 1 being a front, rather than a cut away view.

Therefore, Chin’s illumination source is not protected from intrusion from all directions.

Chin teaches against protecting the light source from direct physical intrusion from all directions

Chin's arrangement requires that the light source always be open to direct physical intrusion. For example, even if heat sinks 36 and 38 are pushed together axially (for example, sink 36 is moved right in Figure 1 until it contacts sink 38), there remains direct access to the light source between the fins of the heat sinks. Further, if the light source were surrounded by solid walls as shown in Fig. 2, air flow to the heat sinks would not be possible, rendering the heat sinks virtually useless. "A *prima facie* case of obviousness can be rebutted if one of the cited references teaches away from the claimed invention. See *In re Geisler*, 43 U.S.P.Q. 2d 1362, 1366 (Fed. Cir. 1997)."

Modifying Chin to protect the light source from all directions would change the principle of operation of Chin

The fundamental principal of operation for Chin is the movement of air about the light source. If the light source were fully encased (protected from direct intrusion), this principal of operation would be altered. "If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)." As quoted in MPEP 2143.01.

Modifying Chin to protect the light source from all directions would render Chin unsatisfactory

The cooling function in Chin is dependent on the flow of air around the light source, between the heat sinks, and around the heat sink fins. Modifying Chin so that the heat sinks fully encase the light source (protect from direct physical intrusion) would drastically alter the required configuration of components and subsequent air movement. "If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)." As quoted in MPEP 2143.01.

Messinger is not analogous to the present invention

Messinger is teaching a light source for fiberoptic illumination. Fiberoptic illumination is not analogous to the microscope recited in Claim 4.

Messinger's baffles do not occlude the emanation of light from the inlet

Claim 4 recites: "...said baffle is operatively arranged to deflect air entering said microscope via said inlet and to occlude the emanation of light from said illumination source through said air inlet..."

Applicant presented arguments regarding the above limitation in the reply mailed May 11, 2006, and for the sake of brevity, these arguments are reaffirmed, but not repeated.

In the Response to Arguments, the Examiner stated: "As stated in the rejection the partitions in the passage are included as baffles therefore the configuration of the passage that includes the partition occludes light from the inlet as admitted by the applicant." In this statement the Examiner seems to be asserting that the passageway in Messinger and the partitions in Messinger are synonymous. That is, that the passageway and the partition are interchangeable. Applicants disagree. First, the partitions are not located in the passageway – they are located outside the passageway near the entrance to the passageway. Applicants have attached a copy of Fig. 1 from Messinger highlighting what Applicants believe to be the passageway. This is the portion of Messinger's apparatus in which light attenuation may occur. Assuming *arguendo* that the partitions are in the passageway, a partition is a solid element separating spaces and a passageway is a space defined by walls and connecting other spaces. For example, partitions can be located in a passageway or can extend from the walls of a passageway, but are separate and distinct from the passageway and walls.

Messinger's partitions and baffles are not proximate the air inlet

Applicant presented arguments regarding the above limitation in the reply mailed May 11, 2006, and for the sake of brevity, these arguments are reaffirmed, but not repeated.

Messinger teaches against locating partitions and baffles proximate the air inlet

Applicant presented arguments regarding the above limitation in the reply mailed May 11, 2006, and for the sake of brevity, these arguments are reaffirmed, but not repeated.

For all the reasons noted above, Claim 4 is patentable over Chin and Messinger. Claims 2, 3, 5-12, and 14, dependent from Claim 4 enjoy the same distinction with respect to Chin and Messinger.

Claim 15

Claim 15 recites: “a fixed baffle assembly located proximate said air inlet and operatively arranged to divert air entering said microscope via said inlet and to occlude the emanation of light from said microscope through said air inlet.” This limitation is substantially recited in Claim 4.

Applicants have shown that Claim 4 is patentable over Chin and Messinger. Therefore, Claim 15 is patentable over Chin and Messinger. Claims 16-24 and 26-29, dependent from Claim 15, enjoy the same distinction from the cited references.

Claim 30

Claim 30 recites: “a fixed baffle located proximate an air inlet of said microscope and operatively arranged to deflect air that enters said microscope via said inlet, wherein said microscope further comprises an illumination source and said baffle occludes the emanation of light from said illumination source through said inlet.” This limitation is substantially recited in Claim 4.

Applicants have shown that Claim 4 is patentable over Chin and Messinger. Therefore, Claim 30 is patentable over Chin and Messinger. Claims 31-34, 36-43, and 46-50, dependent from Claim 30, enjoy the same distinction from the cited references.

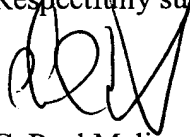
Applicants courteously request that the rejection be removed.

Attorney Docket No. LEAP:135US
U.S. Patent Application No. 10/811,345
Reply to Office Action of June 14, 2006
Date: July 7, 2006

Conclusion

Applicant respectfully submits that all pending claims are now in condition for allowance, which action is courteously requested.

Respectfully submitted,



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Dated: July 7, 2006

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Appendix